SUBJECT INDEX FOR VOLUME 25, 1966

Page numbers with an S attached refer to the Supplement.

A

Abstracts
Midwestern Section, A.S.A.S., 1241
National Meeting, A.S.A.S., 877
Southern Section, A.S.A.S., 247
Western Section, A.S.A.S., 583
Additive correction factors
For weaning weight in beef cattle, 983
Adjustment factors
For carcass, gain and feed traits of beef cattle, 69
Adrenal gland
Effect of exogenous goitrogens upon, in swine, 1154
Age
Effect of heterosis on, at puberty in beef cattle, 744
Effect of, on palatability of beef, 360
Aged corn
Effect of, and supplemental vitamin A on growing-finishing swine, 1024
Agricultural research
Role of the federal government in, 236
Role of universities in, 240
Alfalfa:corn ratio
Effect of, on performance of steers, 102
Alfalfa hay
Collaborative *in vivo* studies on, 1227
Responses of horses and sheep to different physical forms of, 740
Alfalfa leaf meal
Effect of, on occurrence of gastric ulcers in swine, 21
Algae
Nutritive value of, 675
All-concentrate rations
Wheat *versus* corn in, for cattle, 1000
American Society of Animal Science
A.F.M.A. award, 1298
A.S.A.S. animal breeding and genetics award, 1302
A.S.A.S. animal physiology and endocrinology award, 1306
A.S.A.S. distinguished teacher award, 1304
A.S.A.S. extension award, 1300
A.S.A.S. meats research award, 1308
Chairmen of committees, 1317
Committee reports, 934
Fellows elected, 1310
Memorials, 1313
Minutes of the Annual Business Meeting, 1286
Morrison award, 1296
President's address, 1281
Proceedings of the 58th Annual Meeting, 1281
Reports from representatives of the Society, 942
Amino acids
Comparison of, in portal and jugular blood plasma in lambs, 175
Effect of dietary potassium on, in blood plasma of swine, 37
Amino acid pattern
Response of the growing pig to alterations in the, isolated soybean protein, 722
Amylase
Activity of, in pancreatic secretion in young pigs, 113
Androgens
Role of, in regulation of behavioral sex differences in mammals, 21S
Animal breeding research
Where should we be going in, 543
Animal proteins
Use of, for food, 567
Animal science research
Problems and prospects in, 244
Ascorbic acid
Effect of, on incidence of ulcers in swine, 1019
Atomic energy
Symposium on, in animal science, 1209

B

Backfat
Study of, layers of swine, 809
Barley
Effect of steam processing and flaking, on performance and digestion by steers, 392
Value of, for growing pigs, 34
Behavioral aspects
Of reproduction in primates, 49S
Biochemical properties
Variation in, within and among porcine muscles, 277
Biuret
Adaptation to and palatability of, as NPN source for ruminants, 73
Blood constituents
Effect of dietary manganese on, of calves, 532
Blood glucose
Relationship of rumen volatile acids to, in sheep, 1111
Blood metabolites
Effects of defaunation on, in sheep, 765
Blood serum lipid
Relationship between, and some carcass measurements in swine, 138
Blood serum protein
Relationship between, and some carcass measurements in swine, 138
Body composition
Of young bulls and steers, 132
Body size
Productivity of farm flock ewes in relation to, 460
Body weight
Effect of, of ewes on lamb production, 1172
Effect of, on cutting and cooking losses in lambs, 192
Effect of, upon beef carcass traits and palatability, 1197
Breeding efficiency
Factors affecting, in sheep, 5S
Breeding rations
Value of chlortetracycline in, for sows, 752
Breeding season
Regulation of, by light and external stimuli in some mammals, 119S
Buffers
Effect of, on energy metabolism in sheep, 1096

B-vitamins
Effect of, on incidence of esophagogastric ulcers in swine, 1019

C

Cadmium
Effect of, on occurrence of parakeratosis in young pigs, 122
Calcium
Effects of different levels of, in pig diets, 827
Calorigenesis
Effect of growth hormone and environmental temperature on, of cattle, 1076
Effect of thyroxine and environmental temperature on, of dairy cattle, 150
Carbohydrate
Assimilation of, by the newborn pig, 655
Effect of sources of, in the diet of early-weaned pigs, 796
Carbohydrate solubility
Effect of maturity on, of the corn plant, 617
Carbon dioxide absorbent
Influence of, on oxygen consumption by boar spermatozoa, 352
Carcass, beef
Adjustment factors for, 69
Effects of heterosis on, 311
Effects of prefinishing treatment upon, 29
Effects of sex and sire on, of Hereford and Hereford-Red Poll calves, 783
Sire, sex and weight effects upon, palatability, 1197
Carcass composition
Effect of plasma lipids on beef, 831
Effect of water restriction on, of pigs, 663
Techniques for estimating, of lambs, 492
Carcass conformation
Association of beef, with thick and thin muscle yields, 682
Carcass desirability
Effect of feed efficiency on, in swine, 342
Carcass, lamb
Effect of body weight and preslaughter fast on loss in, 192
Genetic and environmental factors affecting, 449
Live animal and carcass measures for predicting traits of, 454
Predicting composition of, by weight and measurements, 92
Carcass, pig
Effect of diet on, 58
Effect of lysine and methionine additions to diet on, 78
Relationships between some physical and chemical parameters of, 526
Carcass quality
Effect of coumestrol in alfalfa on, in lambs, 167
Carcass shrink
Influence of fasting, water deprivation and stress on, of pigs and rats, 377
Carcass yield
Measures of, and tenderness of two beef carcass muscles, 329
Relationships of muscling and finish measurements on beef, 323
Cellulose
Effects of, in purified diets for calves, 355
Cellulose digestibility
Effect of maturity on, of the corn plant, 617
Cellulose digestion
Influence of rumen protozoa and bacteria on, 609
Influence of sulfur, molybdenum and phosphorus on, in cattle, 1014
Chemotherapeutics
Effect of dietary, on the performance and fecal flora of baby pigs, 1102
Chlortetracycline
Effect of different levels and methods of feeding of, to swine, 693
Value of, in breeding rations for sows, 752
Cholesterol
Content of, in bovine carcasses of different maturity and fatness, 1145
Chromic oxide
As an index of digestibility for sheep, 44
Determination of the fecal excretion rate in horses with, 1091
Effect of frequency of feed on, excretion by steers, 185
Comparative response
Of horses and sheep to different physical forms of alfalfa hay, 740
Composition
Of mare's milk, 217
Concentrate rations
Digestibility of, by sheep, 44
Cooking losses
Effect of body weight on, in lambs, 192
Copper
Effect of dietary, on mineral metabolism by sheep, 484
Effect of high levels of, in swine diets, 613
Effect of, on cellulose digestion in cattle, 1014
Corn
Comparative value of, for growing pigs, 34
Effect of, on occurrence of gastric ulcers in swine, 21
In all-concentrate cattle rations, 1000
Corn oil
Effect of, on occurrence of parakeratosis in young pigs, 122
Corpus luteum
Effect of induction of, on pituitary-ovarian relationship in ewes, 87
Local effect of an intrauterine coil on, in the ewe, 472
Cotton fur
Control of, in mink by dietary iron, 1107
Cottonseed meal
Effects of autoclaving and steaming, on digestibility in sheep, 181
Coumestrol
Effect of, content in alfalfa on growth and carcass quality in lambs, 167
Creatinine
Variation in urinary, in beef cattle, 107
Creatinine:nitrogen ratios
Factors affecting, in beef cattle, 107

D

Dam's weight
Relationship of, to growth, rate of calf, 1063
Defaunation
Effect of rumen, in sheep, 765
Desirability of beef
Its characteristics and their measurement, 843
Development and senescence
Of the postnatal bovine ovary, 800

Diammonium phosphate
Adaptation to and palatability of, as NPN source for ruminants, 73
Dietary effects
On protozoa concentration in the rumen, 668
Dietary energy
Effect of levels of, on pituitary potency and ovarian activity in rats, 381
Effect of, on rumen volatile acids and ration digestibility in beef heifers, 988
Dietary iron
Effect of, on control of cotton fur in mink, 1107
Dietary protein
Effect of source and level of, on pigs fed high-copper rations, 613
Dietary sulfate
Effect of high, on fate of a physiological dose of selenate in the lactating ewe, 1054
Diethylstilbestrol
Effect of, on performance of wether lambs, 161
Digestibility
Chromic oxide as an index of, in sheep, 44
Effects of autoclaving and steaming cottonseed meal on, in sheep, 181
Effects of frequency of feeding on nutrient, by steers, 185
Effects of supplemental vitamin D on nutrient, in pigs, 48
Digestion
Effect of steam processing and flaking milo and barley on, by steers, 392
Effect of supplemental enzyme on, of energy and nutrients, 760
Digestive tract
Starch disappearance from different segments of, in steers, 652

E

Electrocardiogram
Use of, in evaluating potassium deficiency in young swine, 203
Electron microscope study
Of bovine epididymal spermatozoa, 1186
Embryo survival
Phosphatase activity in reproductive tissue and its relationship to, in gilts, 711
Energetic efficiency
Of Hampshire and Corriedale ewes fed to maintain body weight, 789
Energy
Availability of, from timothy for lambs, 142
Effect of, supplied by hay or high-concentrate rations on performance of ewes, 624
Utilization of, by cattle for growth and lactation, 1138
Energy intake
Effect of, on reproductive performance of gilts, 706
Effect of, on reproductive performance in swine, 729
Energy metabolism
Influence of frequency and source of protein supplementation on, in lambs, 1040
In sheep as influenced by interactions among ration's energy content, physical form and buffers, 1096
Energy requirement
Of lambs weaned at six to eight weeks of age, 630
Energy value
Of poultry litter for ruminants, 367
Environment
Effect of controlled, on reproductive performance in ewes, 212
Environmental factors
Effect of, on avian reproduction, 90S
Effect of, on lamb carcass traits, 449
Effect of, on occurrence of gastric ulcers in swine, 14
Environmental interactions
Effect of, on weaning weight of Hereford calves, 779
Environmental temperature
Effect of, on calorigenesis of cattle, 1076
Effect of, on calorigenesis of dairy cattle, 150
Effect of, on growing-fattening pigs, 994
Effect of, on thyroid activity of short-term fasted cattle, 1069
Enzymes
Effect of supplemental, in cattle rations, 760
Equivalents
Table of, 270
Estrogen excretion
Urinary, by the bovine before and after parturition, 955
Estrous cycle
Effect of stage of, upon oviduct fluid in ewes, 465
Regulation of, by light and external stimuli in some mammals, 119S
Estrous cycle synchronization
Comparison of, in beef cattle under feedlot conditions, 497
Ether extract
A method for estimating, in the lamb carcass, 967
Excretion rate
Of polyethylene by dairy calves, 64
Exogenous hormones
Effect of, on oviduct fluid in the ewe, 465
External stimuli
Effects of, on regulation of the breeding season and estrous cycles in some mammals, 119S
Exteroceptive factor
Smell as an, in reproduction, 83S

F

Fasting
Influence of, on carcass shrink of pigs and rats, 377
Fat
Effect of, in finishing rations for steers, 480
Fat thickness
Ultrasonic estimates of, in cattle, 1087
Fecal excretion rate
Determination of, in horses with chromic oxide, 1091
Fecal flora
Effect of dietary chemotherapeutics on, of baby pigs, 1102
Federal government
Role of, in agricultural research, 236
Feed digestibility
Effects of defaunation on, in lambs, 765
Feed efficiency
Effect of high levels of dietary zinc on, in beef cattle, 419
Effect of high levels of dietary zinc on, in lambs, 414
Effect of, on carcass desirability in swine, 342
Effects of supplemental enzymes on, of cattle, 760
Heterosis effects on, of beef steers, 299
Feed intake
Effect of high levels of dietary zinc on, in beef cattle, 419

Feed intake—Cont.
Effect of high levels of dietary zinc on, in lambs, 414
Effect of, on reproductive performance in swine, 157
Effect of, on salivary secretion by steers, 817
Physiological and physical factors affecting, by ruminants, 227
Feed utilization
By young bulls and steers, 132
Feeding levels
Effect of, on reproductive performance of swine, 701
Fertility
Effect of heterosis on, in beef cattle, 5
Fertilization
Induced ovulation and subsequent, in the immature gilt, 410
Fertilizing capacity
Influence of uterine environment on, of sperm in cattle, 1083
Finishing rations
Effect of fat and urea in, for steers, 480
Flaking
Effect of, milo and barley on performance and digestion by steers, 392
Floor space allowance
Effect of, on performance of growing-finishing swine, 386
Follicle-stimulating hormone
Potency of the bovine pituitary gland after various methods of preservation, 223
Food production
Chemical and biochemical, for man and animal, 575
Role of livestock in, 552
Forage intake
Relation between, and gut fill, 283
Forage plants
Hemicellulose of, 83
Free plasma amino acids
Changes in, of sheep due to preslaughter stunning, 1133
Frequency of feeding
Effect of, on excretion of chromic oxide by steers, 185
Effect of, on performance of ewes, 624
Frequency of supplementation
Influence of, of protein on energy metabolism in lambs, 1040
Full feeding
Relationship of, to some physical and chemical parameters of pig carcasses, 526

G

Gain
Adjustment factors for, of beef cattle, 69
Effect of high levels of dietary zinc on, in cattle, 419
Effect of high levels of dietary zinc on, in lambs, 414
Effect of lysine and methionine addition to swine diets on, 78
Effect of supplemental vitamin D on, in pigs, 48
Garbage
Nutritive value of, for swine, 52
Gastrointestinal content
Of volatile fatty acids in sheep, 402
Genetic association
Between porcine muscle properties, 962
Genetic interactions
Effect of, on weaning weight of Hereford calves, 779
Glucose
Effect of, on ovarian activity in ewes, 836
Goitrogens
Effect of exogenous, on some physical and biochemical properties of porcine muscle and adrenal gland, 1154
Growth
Effect of coumestrol in alfalfa on, in lambs, 167
Effects of supplemental enzymes on, of cattle, 760
Utilization of energy by cattle for, 1138
Growth hormone
Effect of, on calorigenesis of cattle, 1076
Growth rate
Effects of heterosis on, of beef heifers, 290
Effects of heterosis on, of beef steers, 299
Of young bulls and steers, 132
Relationship of dam's weight and weight change to, of calf, 1063

H

Hay:grain ratio
Effect of, on salivary secretion and ruminal characteristics of steers, 1176
Hemicellulose
Of forage plants, 83
Hemoglobin
Evaluation of, in steers fed grain on pasture or cut forage and grain in drylot, 1128
Of zebu cattle and the Indian buffalo, 445
Herbage intake
Physiological and physical factors affecting, by ruminants, 227
Heterosis
Effect of, on age and weight at puberty in beef cattle, 744
Effect of, on carcass traits of beef steers, 311
Effect of, on fertility in beef cattle and calf performance, 5
Effects of, on growth and feed efficiency of beef steers, 299
Effects of, on growth rate of beef heifers, 290
Hormone production
Nutritional effects on, 68S
Hypervitaminosis A
In the young pig, 1123
Hysterectomy
Effect of, on pituitary-ovarian relationships in ewes, 87

I

Inequality of function
Of the right and left ovaries and uterine horns of the ewe, 1169
Intrauterine coil
Local effect of, on the corpus luteum of the ewe, 472

J

Jugular blood plasma
Amino acids in, of lambs, 175

K

K^{40} measurement
Estimation of carcass lean muscle mass in steers by, 1218

L

Lactating ewe
Effect of sulfate on fate of a physiological dose of selenate in the, 1054
Lactation
Utilization of energy by cattle for, 1138
Lactic acid
Feeding value of supplemental, for dairy cattle, 397
Lamb
Consumer preferred, 1232
Lamb carcass
A method for estimating ether extract in the boneless, 967
Lambing rate
Relationships between ovulation rate and, 1029
Light
Effects of, on avian reproduction, 90S
Effects of, on regulation of the breeding season and estrous cycles in some mammals, 119S
Limited feeding
Relationship of, to some physical and chemical parameters of pig carcasses, 526
Lipase
Activity in pancreatic secretion in young pigs, 113
Lipids, semen
Effect of boar semen senility on peroxidation of, 688
Litter size
Effect of, on uterine metabolic status in rats, 339
Genetic and environmental aspects of, in swine, 1148
Luteinizing hormone
Potency of the bovine pituitary gland after various methods of preservation, 223
Lysine
Effect of, addition to corn-soybean meal diets on rate and efficiency of gain of swine, 78
Effect of supplemental, on rate and efficiency of gain of growing pigs, 58
Effect of, supplementation on nitrogen retention of barrows, 806

M

Macadamia nuts
Feeding value of, for sheep, 439
Management practices
Effect of, on performance of wether lambs, 161
Manganese
Effect of high dietary levels of, on performance of calves, 532
Marbling
Effect of, on palatability of beef, 360
Mating time
Factors affecting, in sheep, 5S
Maturity
Effect of, on cholesterol in subcutaneous and intramuscular lipid depots from bovine carcasses of different maturity, 1145
Measuring techniques
For bovine *longissimus dorsi* area, 334
Melengestrol acetate
Effects of, on performance of feedlot cattle, 1048
Maintenance of pregnancy in ovariectomized heifers with, 207
Metabolic characteristics
Of washed boar spermatozoa, 348
Metabolic status
Effect of litter size on, in rats, 339
Metabolism
Carbohydrate, in the newborn pig, 655
Methionine
Effect of, addition to corn-soybean diets on rate and efficiency of gain of swine, 78
Effect of supplemental, on rate and efficiency of gain of growing pigs, 58
Effect of, supplementation on nitrogen retention of barrows, 806
Milk composition
Of ewes fed to maintain body weight, 789
Of the mare, 217
Milk production
Estimating, of beef cows by use of oxytocin, 1045
Of ewes fed to maintain body weight, 789
Milo
Effect of steam processing and flaking, on performance and digestion by steers, 392
Mineral content
Of garbage, 52
Molybdenum, dietary
Effect of, on mineral composition of rumen fluid, 1010
Molybdenum toxicity
Development of, syndrome, 96
Multiplicative correction factors
For weaning weight in beef cattle, 983
Muscle
Techniques for measuring bovine *longissimus dorsi* area, 334
Muscle yields
Association of beef carcass conformation with, 682
Myoglobin
Evaluation of, in steers fed grain on pasture or cut forage and grain in drylot, 1128

N

News and Notes, 266, 601, 945, 1318
Ninhydrin reactive substances
Changes in, of sheep due to preslaughter stunning, 1133
Nitrogen
Effect of source of, on mineral metabolism by sheep, 484
Nitrogen balance
Effects of supplemental enzymes on, of cattle, 760
Nitrogen fertilization
Effect of, on palatability and nutritive value of orchardgrass, 636
Nitrogen retention
Effect of autoclaving and steaming cottonseed meal on, in sheep, 181
Effect of lysine, methionine and tryptophan supplementation on, of barrows, 806
Effect of water restriction on, in pigs, 663
Nutrition
Effects of, on hormone production, 68S
Nutritional factors
Effect of, on occurrence of gastric ulcers in swine, 14
Nutritional levels
Effect of, on pituitary and ovarian function in ewes, 716
Nutritive value
Effect of nitrogen fertilization on, of orchardgrass, 636
Effect of pelleting on, of horse rations, 1059
Of algae grown on sewage, 675

Nutritive value—Cont.
Of macadamia nuts for sheep, 439
Of timothy for lambs, 142
Nuclear morphology
Of spermatozoa from inbred and linecross bulls, 476

O

Oats
Effect of, in ration on occurrence of gastric ulcers in swine, 21
Effect of, on rate and efficiency of gain of growing pigs, 58
Orchardgrass
Effect of nitrogen fertilization on palatability and nutritive value of, 636
Organoleptic qualities
Of beef from steers fed grain on pasture or cut forage and grain in drylot, 1128
Ovarian activity
Effect of glucose and triiodothyroxine on, in ewes, 836
Pituitary potency and, in rats on two energy levels, 381
Ovarian function
Effect of nutritional levels on, in ewes, 716
Effect of uterine extracts and blood vessel ligation on, in ewes, 1159
Ovarian venous plasma
Metabolites of progesterone in, of the cycling domestic sow, 1181
Ovary
Development and senescence of the postnatal bovine, 800
Inequality in function of the right and left, of the ewe, 1169
Oviduct fluid
Effect of stage of estrous cycle upon volume of, in ewes, 465
Ovulation
Induction of, in the immature gilt, 410
Ovulation rate
Relationships between lambing rate and, 1029
Oxygen consumption
Influence of carbon dioxide absorbent on, by boar spermatozoa, 352
Oxytocin
Use of, for estimating milk production of beef cows, 1045

P

Palatability
Effect of age, marbling and sex on, of beef, 360
Effect of nitrogen fertilization on, of orchardgrass, 636
Influence of certain live and quantitative carcass traits upon, of beef, 1203
Pancreatic secretion
Characteristics of, in young pigs, 113
Parakeratosis
Effect of zinc, corn oil and cadmium on, in young pigs, 122
Parturition
Effect of, on urinary excretion of estrogen in the bovine, 955
Pasture
Value of supplemental vitamin A for fattening beef cattle on, 814
Pelleted rations
Effect of, on gain and carcass characteristics of swine, 58
Effect of, on nutritive value of horse rations, 1059
Effect of, on salivary secretion and ruminal characteristics of steers, 1176
Performance, cattle
Effect of heterosis on, of calves to weaning, 5
Effect of high dietary levels of manganese on, of calves, 532
Effect of melengestrol acetate on, 1048
Effect of physical form of ration on, 102
Effect of prefinishing treatment upon finishing, 29
Effect of sex and sire on, of Hereford and Hereford-Red Poll calves, 783
Effect of steam processing and flaking milo and barley on, 392
Performance, sheep
Effect of frequency of feeding on, 624
Performance, swine
Effect of dietary chemotherapeutics on, and fecal flora of baby pigs, 1102
Effect of floor space allowance on, 386
Peroxidation of semen lipids
Effect of boar semen senility on, 688
Phenotypic association
Between porcine muscle properties, 962
Phosphatase activity
In reproductive tissues and its relationship to embryo survival in gilts, 711
Phosphorus, dietary
Effect of, on mineral composition of rumen fluid, 1010
Influence of, on cellulose digestion in cattle, 1014
Physical form
Effect of, of alfalfa hay on response of horses and sheep, 740
Effect of, of feed on incidence of esophagogastric ulcers in swine, 1019
Effect of, of hay and grain on B-vitamins in ruminal fluid of steers, 539
Effect of, of ration on energy metabolism in sheep, 1096
Performance of steers as influenced by, of the ration, 102
Pituitary potency
Bovine, after various methods of preservation, 223
Effect of nutritional levels on, in ewes, 716
In rats on two energy levels, 381
Plasma cholestrol
Concentration of, in range cattle, 1035
Plasma lipids
Effect of, on beef carcass composition, 831
Plasma nonesterified fatty acids
Relationship of rumen volatile acids to, in sheep, 1111
Polyethylene
Excretion rate of, by dairy calves, 64
Porcine muscle
Effect of exogenous goitrogens upon some physical and biochemical properties of, 1154
Phenotypic and genetic association between, properties, 962
Variation in some physical and biochemical properties of, 277
Pork quality
Definition, characteristics and significance of, 839
Portal blood plasma
Amino acids in, of lambs, 175

Potassium
Effect of, on incidence of ovine urinary calculi, 1005
Electrocardiographic evaluation of, deficiency in young swine, 203
Relationship of, with protein and basic amino acids in swine, 37
Poultry litter
Protein and energy value of, for ruminants, 367
Pregnancy
Diagnosis of, in the sow, 646
Maintenance of, in ovariectomized heifers with melengestrol acetate, 207
Preslaughter fast
Effect of, on cooking and cutting losses in lambs, 192
Preslaughter stunning
Effect of, on quantitative changes in free plasma amino acids and other ninhydrin reactive substances in sheep, 1133
Production factors
Associated with weaning records in swine, 372
Production, lamb
Effect of body weight of ewes on, 1172
Productivity, ewe
Effect of body size on, 460
Progesterone
Metabolites of, of the cycling domestic sow, 1181
Progestogen
Effect of exogenous, on reproductive phenomena in mares, 821
Effect of, on reproductive performance in swine, 157
Prolactin
Potency of the bovine pituitary gland after various methods of storage, 223
Protease
Activity in pancreatic secretion in young pigs, 113
Protein
Effect of level of, on plasma potassium in swine, 37
Value of poultry litter for ruminants, 367
Protein intake
Effect of, on reproductive performance in swine, 729
Protein requirement
Of lambs weaned at six to eight weeks of age, 630
Protein source
Influence of, on energy metabolism in lambs, 1040
Protein, soybean
Response of the growing pig to alterations in the amino acid pattern of, 722
Protozoa concentration
Dietary effects upon, in the rumen, 668
Effect of rumen volume on, in sheep, 516
Psychological factors
Affecting mating time and breeding efficiency in sheep, 5S
Puberty, beef cattle
Effect of heterosis on age and weight at, 744
Purified diet
Effect of additions of volatile fatty acids to, for lambs, 734
Effect of cellulose in, for calves, 355
Effect of, on rumen chemical and microbial characteristics of steers, 521

Q

Quality factors
Of the *longissimus dorsi* of young bulls and steers, 504

R

Radioactivity measurement procedures
For large animals, 1209
Ration digestibility
Dietary energy and protein effects on, in beef heifers, 988
Influence of rumen protozoa on, in lambs, 1116
Rations, horse
Effect of pelleting on the nutritive value of, 1059
Reproduction
Behavioral aspects of primate, 49S
Light and other environmental factors affecting avian, 90S
Reproduction symposium
Address given at banquet meeting, 143S
Reproductive behavior
Effects of visual stimuli on, in bulls, 36S
Reproductive performance, ewes
Effect of controlled environment on, 212
Reproductive performance, swine
Effect of feeding levels on, 701
Effect of feed intake and progestogen on, 157
Effect of protein and energy intake on, 729
Influence of energy intake on, 706
Reproductive phenomena, mares
Effect of exogenous progestogens on, 821
Reproductive tissue
Phosphatase activity in, and its relationship to embryo survival in gilts, 711
Restricted feeding
Influence of, on pig carcasses, 526
Rib-eye area
Ultrasonic estimates of, in cattle, 1087
Rice hulls
Utilization of, by beef cattle, 25
Rumen
Chemical and microbial characteristics of the, of steers fed purified or natural diets, 521
Fermentation in, as affected by physical form of the diet, 102
Rumen bacteria
Influence of, on cellulose digestion, 609
Rumen fill
Relationship between, and *ad libitum* intake of forages, 283
Rumen fluid
Concentration of B-vitamins in, of steers, 539
Effect of dietary phosphorus, sulfur and molybdenum on, composition, 1010
Rumen metabolism
Alteration in, in lambs fed high levels of zinc, 424
Effects of defaunation on, in sheep, 765
Effect of rumen volume on, in sheep, 516
Rumen microorganisms
In vitro procedure for studying digestion by, 128
Rumen protozoa
Dietary effects upon concentration of, 668
Influence of, on cellulose digestion, 609
Influence of, on volatile acid production and ration digestibility in lambs, 1116
Rumen studies
Techniques and procedures for *in vitro* and *in vivo*, 855
Rumen volatile acids
Dietary energy and protein effects on, in beef heifers, 988
Relationship of, to blood glucose and plasma nonesterified fatty acids in sheep, 1111

Rumen volume
As a factor in individual sheep differences, 509
Effect of, on metabolism and protozoa concentration in sheep, 516
Ruminal characteristics
Effect of pelleting rations and hay:grain ratio on, of steers, 1176

S

Salivary secretion
Effect of feed intake on, by steers, 817
Effect of pelleting rations and hay:grain ratio on, of steers, 1176
Selenate
Effect of sulfate on fate of a physiological dose of, in the lactating ewe, 1054
Selenium
Effect of, on weaning weights of cattle and sheep, 648
Semen, boar
Effect of senility of, on peroxidation of semen lipids, 688
Sex
Effect of, on palatability of beef, 360
Effect of, on performance and carcass traits of Hereford and Hereford-Red Poll calves, 783
Effect of, upon beef carcass traits and palatability, 1197
Sex differences in mammals
Role of androgens in the establishment and regulation of, 21S
Shades
Effectiveness of movable, for growing-finishing swine, 756
Short-term fasting
Effect of, on thyroid activity of cattle, 1069
Sire
Effect of, on performance and carcass traits of Hereford and Hereford-Red Poll calves, 783
Effect of, upon beef carcass traits and palatability, 1197
Slaughter weight
Influence of, on pig carcasses, 526
Smell
As an exteroceptive factor in reproduction, 83S
Sodium
Effect of, on incidence of ovine urinary calculi, 1005
Soybean protein
Response of the growing pig to alterations in the amino acid pattern of, 722
Spermatozoa
Electron microscope study of bovine epididymal, 1186
Influence of carbon dioxide absorbent on oxygen consumption by boar, 352
Influence of uterine environment on fertilizing capacity of, in cattle, 1083
Metabolic characteristics of washed boar, 348
Nuclear morphology of, from inbred and linecross bulls, 476
Starch
Disappearance of, from the digestive tract of steers, 652
In vitro procedure for studying, digestion by rumen microorganisms, 128
Steam processing
Effect of, milo and barley on performance and digestion by steers, 392
Stilbestrol
Effect of, on *longissimus dorsi* of young bulls and steers, 504
Stress
Influence of, on carcass shrink of pigs and rats, 377
Sr^{90} chloride
Availability of, to sheep and swine, 199
Sr^{90} phytate
Availability of, to sheep and swine, 199
Sulfur, dietary
Effect of, on mineral composition of rumen fluid, 1010
Effect of source of, on mineral metabolism by sheep, 484
Influence of, on cellulose digestion in cattle, 1014
Symposia
Factors influencing the voluntary intake of herbage by ruminants: physiological and physical factors limiting feed intake, 227
On atomic energy in animal science, 1209

T

Table of equivalents
Of customary weights and measures with metric equivalents, 270
Teaching
Graduate student training in animal science: degree requirements and the involvement of the student in the research program, 1236
Techniques and procedures
For *in vitro* and *in vivo* rumen studies, 855
Tenderness, muscle
Relationship between, and measures of beef carcass yield, 329
Thiouracil feeding
Effects of, on growing- fattening pigs, 994
Thyroid activity
Effect of short-term fasting on, of cattle, 1069
Thyroxine
Effect of, on calorigenesis of dairy cattle, 150
Tissue changes
In beef cattle fed high levels of zinc, 432
In lambs fed high levels of zinc, 424
Triiodothyronine
Effect of, on ovarian activity in ewes, 836
Tryptophan
Effect of, supplementation on nitrogen retention of barrows, 806
Requirement of, by early-weaned pigs, 774
Two-way interactions
Effect of certain factors and their, on weaning weight in beef cattle, 972

U

Ulcers, swine
Effect of nutritional factors and physical form of feed on incidence of, 1019
Occurrence of gastric, 14, 21
Ultrasonics
Estimates of rib-eye area and fat thickness in cattle with, 1087
Universities
Role of, in agricultural research, 240
Urea
Adaptation to and palatability of, as NPN source for ruminants, 73
Effect of, in finishing rations for steers, 480
Urine
Progesterone metabolites in, of the cycling domestic sow, 1181

Urinary calculi, ovine
Effect of sodium and potassium on, 1005
Urinary creatinine
Variation in, in beef cattle, 107
Urinary excretion of estrogen
By the bovine before and after parturition, 955
Uterine environment
Influence of, on fertilizing capacity of sperm in cattle, 1083
Uterine extracts
Effect of, on ovarian function of ewes, 1159
Utero-ovarian relationships
Local component of, in the ewe, 1164
Uterus
Metabolic status of, during pregnancy in rats, 339
Utilization of dietary components, lambs
Effect of additions of volatile fatty acids to purified diets on, 734

V

Visual stimuli
Effects of, on reproductive behavior in bulls, 36S
Vitamin A
Effect of supplemental, and aged corn on growing-finishing swine, 1024
Hypervitaminosis A in the young pig, 1123
Value of supplemental, for fattening beef cattle on pasture, 814
Vitamin D
Effect of levels and sources of, for pig diets, 827
Effect of supplemental, on digestibility and tissue composition of pigs, 48
Volatile fatty acids
Addition of, to purified lamb diets, 734
Gastrointestinal content and mucosal oxidation of, in sheep, 402
Influence of rumen protozoa on production of, in lambs, 1116

W

Water deprivation
Influence of, on carcass shrink of pigs and rats, 377
Water restriction
Effect of, on nitrogen retention and carcass composition of pigs, 663
Water sprinklers
Effectiveness of, for growing-finishing swine, 756
Weaning records
Production factors associated with, in swine, 372
Weaning weight
Additive *versus* multiplicative correction factors for, in beef cattle, 983
Effects of certain factors and their interactions on, in beef cattle, 972
Effects of genetic and environmental interactions on, of Hereford calves, 779
Effects of selenium on, of cattle and sheep, 648
Weight, beef cattle
Effect of heterosis on, at puberty, 744
Weight change
Relationship of dam's, to growth rate of calf, 1063
Wheat
Comparative value of, for growing pigs, 34
Effect of, on occurrence of gastric ulcers in swine, 21
In all-concentrate cattle rations, 1000

Z

Zinc
Effect of dietary, on occurrence of parakeratosis in young pigs, 122
Effect of high levels of dietary, in beef cattle, 419, 432
Effect of high levels of dietary, in lambs, 414, 424

AUTHOR INDEX FOR VOLUME 25, 1966

Page numbers of abstracts for the National and Sectional Meetings are identified by an asterisk. Page numbers with an S attached refer to the Supplement.

A

Abdulgani, Imam, 1263*
Absher, Curtis A., 249*
Ackerman, G., 889*
Acord, C. R., 896*
Adams, J. R., Jr., 247*
Ademosun, Akin, 912*
Ahlschwede, W. T., 916*
Albaugh, R., 586*
Albin, Robert C., 107, 587*, 593*
Albright, J. L., 885*, 903*, 905*
Alden, R., 914*
Alderson, N. E., 896*
Aldinger, S. M., 887*
Algeo, J. W., 896*
Ali, R., 888*, 890*
Allaire, F. R., 877*
Allen, D. M., 1279*
Allen, E., 962
Allen, G. A., Jr., 263*
Alligood, Vernon, 44
Almquist, J. O., 916*, 920*, 927*
Alsmeyer, W. L., 888*
Amann, R. P., 916*, 917*, 927*, 929*
Ames, D. R., 927*
Amick, R. J., 889*
Ammerman, C. B., 250*, 263*, 613, 906*
Anand, A. S., 917*
Anderson, L. L., 922*, 929*, 1262*, 1266*
Anderson, M. D., 1123
Anderson, R. R., 917*
Andrews, Frederick N., 240
Anthony, W. B., 247*
Arehart, L. A., 1274*
Argauer, R. J., 909*
Arora, S. P., 1253*
Arrington, L. R., 263*
Arthaud, V. H., 69, 1045
Arthur, R. D., 1275*
Atwood, James, 258*

B

Babatunde, G. M., 526, 888*
Backus, W. R., 886*
Bahn, A. V., 167
Bailey, C. M., 132, 504, 595*, 883*
Baird, D. M., 259*, 889*
Baker, D. H., 1248*
Baker, F. N., 476
Baker, R. D., 918*
Bakke, J. E., 929*
Baltzer, B. V., 894*
Balwani, Tikam L., 617
Barley, D. A., 918*
Barnes, R. F., 912*, 914*
Barnhart, C. E., 256*, 257*
Barr, G. R., 1280*
Barrentine, B. F., 249*
Barrett, J. E., Jr., 248*
Barrick, E. R., 532
Barringer, Robert, 1257*
Barth, K. M., 52
Bassett, J. W., 583*, 877*, 880*
Bath, D. L., 1138
Bauernfeind, J. C., 889*
Baumann, C. A., 1054, 1246*
Baumgardt, B. R., 912*
Becker, D. E., 203, 386, 888*, 890*, 891*, 1255*, 1273*, 1277*
Becker, R. B., 250*
Beecher, G. R., 1262*
Beeson, W. M., 355, 414, 419, 424, 432, 760, 814, 890*, 901*, 907*, 908*, 1019, 1024, 1247*
Behrens, J. H., 1273*
Bell, F. L., 586*
Bell, J. M., 138
Bell, M. C., 199
Belling, T. H., Jr., 587*
Bellows, R. A., 381, 836
Benson, R. W., 918*, 926*
Benz, J. J., 897*
Bereskin, B., 1272*
Bergen, W. G., 1248*
Berry, B. W., 587*, 588*, 592*
Berry, T. H., 48, 722, 827
Beverly, John R., 919*
Bhattacharya, Asok Nath, 367, 897*
Bhattacharya, S., 445
Bickoff, E. M., 167
Biswas, D. K., 342
Blackburn, T. R., 589*
Blaser, R. E., 913*
Bloomfield, R. A., 1274*, 1275*, 1276*
Bloss, R. E., 1048
Blumer, T. N., 1128
Blunn, C. T., 1272*
Bogard, Greg, 921*
Bohman, V. R., 96, 132, 504, 595*, 915*
Bolin, D. W., 1259*
Bolt, D. J., 919*
Bond, T. E., 596*
Boston, Andrew C., 881*, 1274*
Boston, W. D., 1252*
Boulware, R. F., 256*
Bounds, W. R., 889*
Bovard, K. P., 877*
Bowland, J. P., 377
Bradford, G. E., 454
Bradley, B. L., 894*, 898*, 1247*, 1260*
Bradley, N. W., 185, 260*, 261*, 265*, 480, 539, 783, 899*, 902*, 910*
Brady, Nyle C., 236
Brar, B. S., 891*
Bratzler, L. J., 882*
Bray, R. W., 831, 839, 885*, 887*, 962, 1197, 1203
Breidenstein, B. C., 69, 1209, 1218, 1261*
Brent, B. E., 217, 894*, 897*, 898*, 1247*, 1260*, 1278*
Briggs, J. R., 646
Brinks, J. S., 779
Brinsfield, T. H., 919*
Bris, E. J., 594*
Briskey, E. J., 884*, 962, 1262*
Brisson, G. J., 910*
Broderick, G. A., 1246*
Brookes, I. M., 1270*
Brown, J. R., 1249*, 1269*
Brown, L. D., 397
Brown, Paul B., 261*
Brown, V. L., 258*
Bruce, H. M., 83S
Brungardt, V. H., 831, 1197, 1203
Brunner, M. A., 497
Brusov, V., 1241*
Bryant, H. T., 913*
Bryant, J. M., 1256*
Buchanan-Smith, J. G., 893*
Buchman, D. T., 249*
Burfening, P. J., 919*
Burgess, P. L., 898*
Burnside, J. E., 257*
Burroughs, Wise, 609, 1116, 1256*, 1257*
Busch, D. A., 1271*
Busch, W. A., 1261*
Bush, L. E., 1260*
Butcher, J. E., 590*, 596*
Butcher, R. L., 918*, 1164
Butler, W. R., 1268*
Buxton, R. E., 1276*
Byerly, T. C., 552

C

Cabell, C. A., 1107
Calhoun, M. C., 891*, 920*
Cameron, C. W., 898*
Campbell, C. M., 247*
Campbell, L. D., 1248*
Carpenter, D. L., 283
Carpenter, James A., Jr., 594*
Carpenter, Z. L., 883*, 1232
Carroll, E. J., 583*
Carroll, F. D., 911*
Carter, R. C., 5, 263*, 878*
Cartwright, T. C., 251*, 253*, 255*, 583*
Casida, L. E., 87, 381, 472, 716, 836, 923*, 929*, 930*, 1169, 1236, 1262*
Cassard, D. W., 590*, 883*

Cassens, R. G., 884*, 885*, 887*, 1262*
Catron, D. V., 1102
Chagas, E. C., 264*
Chalupa, William, 905*, 913*
Chancerelle, Julianne, 504
Chandler, P. T., 64, 898*, 903*
Chaney, C. H., 256*, 257*
Chapin, Roy E., 889*
Chapman, A. B., 342, 962, 1148
Chapman, H. L., Jr., 648
Chapman, Phyllis, 122, 888*, 895*, 898*
Chappell, G. L. M., 899*
Chaudhary, R. P., 1270*
Christenson, R. K., 599*, 1267*
Church, D. C., 586*, 591*, 595*, 597*
Clanton, Donald C., 102, 107, 597*, 599*
Clary, J. J., 899*
Clawson, A. J., 893*, 895*
Clifford, A. J., 259*, 263*, 893*, 899*
Cline, J. H., 1248*
Cline, T. R., 734
Cliplef, R. L., 1243*
Cmarik, G. F., 914*, 1253*, 1266*
Cock, L. M., 899*
Cockrell, Tom, 921*
Coggins, E. G., 918*
Cole, C. L., 1253*
Cole, J. W., 255*, 256*
Cole, Mary E., 254*
Colenbrander, V. F., 881*, 1256*
Collins, W. E., 87
Colvin, H. W., Jr., 250*, 258*
Combs, G. E., 48, 613, 706, 711, 722, 827, 920*
Condon, R. J., 1270*
Conrad, B. E., 253*
Conrad, H. R., 227
Conrad, J. H., 1247*
Cook, B., 922*, 926*
Cook, G. A., 96
Cooper, B. S., 1267*
Cooper, G. J., 920*
Cooper, R. J., 255*, 264*
Corbridge, Margaret, 904*
Cordts, R. H., 806
Corley, C., 909*
Costello, W. J., 1260*
Courot, M., 119S
Cox, D. F., 878*
Cox, J. L., 203, 386, 890*, 1277*
Cragle, R. G., 906*, 907*, 908*
Craig, H. B., 1128
Cramer, D. A., 588*
Crawford, A. W., 596*
Criblez, T. L., 1264*
Crockett, J. R., 251*
Cromwell, G. L., 890*, 1247*
Crookshank, H. R., 1005
Cruea, D. D., 585*
Crum, R. C., Jr., 48, 827, 920*
Cuitun, Luis, 392
Cummings, K. R., 881*, 1256*, 1270*
Cundiff, L. V., 261*, 265*, 783, 972, 983
Cunningham, D. C., 916*, 920*
Cunningham, G. N., 532
Cunningham, H. M., 663
Cunningham, M. D., 903*
Cupps, Perry T., 646
Curl, S. E., 587*, 921*
Curtin, T. M., 1019
Curtis, S. E., 655, 1267*

D

Dahmer, E. J., 890*
Dalrymple, R. H., 883*
Danke, R. J., 181
Das, B. K., 1269*
Davidson, T. P., 29, 591*, 595*
Davis, G. K., 906*, 1010, 1014
Davis, J. K., 1087
Davis, L. E., 1274*
Davis, R. E., 521, 817, 907*, 909*, 988, 1000, 1176
Davis, S. L., 1253*
Dearborn, D. D., 595*
Deb, N. C., 445
Dehority, B. A., 617, 1257*
Dermody, W. C., 585*
DeRouen, T. M., 252*
Desjardins, Claude, 223, 926*
Dhindsa, D. S., 921*, 1266*
Dickey, James R., 251*
Dietz, R. W., 921*
Dillard, E. U., 264*, 1063
Dillon, W. M., 881*
Dinkel, C. A., 1271*, 1272*
Dinusson, W. E., 1259*
Donaldson, L. E., 497
Donefer, E., 1227
Dopp, Aileen, 49S
Drain, J. J., 752, 1255*
Drake, C. L., 900*
Drewry, K. J., 878*, 1260*, 1279*
Driedger, A., 908*
DuBose, L. E., 255*
du Buisson, F. du Mesnil, 119S
Dukelow, W. R., 58, 78, 1243*, 1244*
Dunbar, J. R., 586*
Dunn, L. L., 908*
Durham, R. M., 591*, 593*, 594*
Dutton, J. E., 900*
Dyck, G. W., 1266*
Dyer, I. A., 594*, 903*, 910*
Dynes, J. R., 589*
Dysli, R. R., 263*
Dziuk, P. J., 410, 921*, 922*, 1265*, 1266*

E

Easley, J. E., 648
Eaton, H. D., 891*, 920*
Edgerton, L. A., 1265*
Ehrenreich, J. H., 598*
Elam, C. J., 988
Ellington, E. F., 920*
Elliott, D. S., 922*
Elliott, R. F., 752, 1255*
Ellis, G. F., Jr., 591*, 593*, 594*
Ellis, W. C., 896*
Ellis, William, 904*
Ellsworth, Gary, 1279*
Ely, D. G., 250*, 900*
Embry, L. B., 595*, 1245*, 1258*
Emerick, R. J., 595*, 1245*
Emery, R. S., 397
Eneroldsen, M. E., 1268*
England, D. C., 34
Erb, R. E., 348, 406, 955, 1181, 1268*
Ercanbrack, S. K., 878*
Erickson, B. H., 800
Erickson, D. O., 1259*
Erickson, L. E., 256*
Essig, H. W., 261*, 913*
Estergreen, V. L., Jr., 955
Eudaly, R. M., 901*
Evans, Joe L., 888*, 890*, 891*, 1010, 1014
Ewan, R. C., 1249*, 1278*
Ewing, S. A., 901*, 909*, 922*

F

Farlin, S. D., 1252*
Farner, Donald S., 90S
Fay, L. D., 1278*
Feaster, J. P., 920*
Featherston, W. R., 1019
Field, R. A., 360, 587*, 588*
Fielder, M. M., 255*
Figroid, Wayne, 592*
Findlay, J. D., 932*
First, N. L., 342, 688, 917*, 927*, 962
Fitzgerald, M. F., 887*
Flipse, R. J., 921*
Foley, C. W., 348, 352, 406, 655, 930*, 1265*, 1267*, 1268*
Follett, Brian K., 90S
Fonnesbeck, Paul V., 891*
Fontenot, J. P., 367, 885*, 899*, 900*, 901*, 913*
Foote, R. H., 933*
Foote, Warren C., 584*, 585*, 586*, 924*
Foote, W. D., 584*, 585*, 922*
Forbes, R. M., 1246*
Ford, J. J., 922*
Forrest, J. C., 962
Fox, C. W., 167, 591*
Fredeen, H. T., 543
Frederick, E. C., 1254*
Freeland, R. S., Jr., 894*
Freitag, R. R., 901*
Friend, D. W., 663
Frischknecht, N. C., 599*
Fritz, R. E., 1260*
Frobish, L. T., 729, 1249*, 1278*
Frost, G. R., 1256*
Funderburg, M. E., 893*
Furr, R. D., 594*

G

Gaines, J. A., 5, 878*
Gallo, J. T., 774
Galt, H. D., 598*
Gardner, R. W., 789, 886*
Garrett, W. N., 596*
Garrigus, R. R., 881*, 1279*
Garrigus, U. S., 734, 1252*, 1253*, 1270*

Garrison, G. W., Jr., 257*
Garwood, V. A., 1148
Gaskins, C. T., 587*
Gassner, F. X., 896*
Gavan, James A., 251*
Gebauer, M. R., 923*, 926*
Gehlbach, G. D., 386, 410
Geissler, B. R., 589*
George, Ray, 192
Gerken, H. J., Jr., 901*
Gerrits, R. J., 923*, 1266*
Gibson, E. W., 923*, 926*
Gier, H. T., 1159
Gill, D. R., 34
Ginther, O. J., 472, 923*, 933*, 1262*, 1263*
Givens, R., 596*
Givens, R. L., 756
Glaze, Eva Carolyn, 254*
Glenn, J. C., 257*, 915*, 924*
Glimp, H. A., 251*
Godley, W. C., 212
Godsey, Vernon D., 913*
Goekin, M., 589*
Goll, D. E., 323, 329, 334, 1145, 1260*, 1261*
Gomes, W. R., 925*, 1181, 1264*, 1268*
Goode, Lemuel, 465
Goodrich, R. D., 259*, 484, 1251*, 1252*, 1269*, 1270*, 1277*
Goodwin, T. L., 885*
Gothard, Robert H., 256*
Gouwens, D. W., 1248*
Goy, Robert W., 21S
Graham, E. R., 1249*
Grant, R. S., 58, 78, 1241*, 1242*, 1243*, 1244*
Graves, W. E., 929*, 930*
Greathouse, T. R., 265*, 783, 1266*
Green, G. R., 596*
Greep, R. O., 143S
Gregory, K. E., 69, 290, 299, 311, 744
Grifo, A. P., Jr., 693, 882*, 895*
Grooms, W. O., 893*
Grummer, R. H., 14, 21, 890*, 1247*, 1248*
Gutierrez, J., 521

H

Haenlein, G. F. W., 740, 1091
Hafs, H. D., 223, 926*
Hale, E. B., 36S
Hale, O. M., 259*, 756
Hale, W. H., 392, 592*, 593*, 598*, 903*, 910*, 1035
Hall, George A. B., 249*
Hall, G. M., 250*
Hall, J. L., 277
Hall, R. C., Jr., 891*, 920*
Hallett, D. K., 883*
Hammes, R. C., Jr., 913*
Handlin, D. L., 887*
Hanke, H. E., 1241*, 1242*, 1243*, 1244*, 1258*
Hansard, Sam L., 252*, 256*, 257*, 261*, 924*
Hansel, William, 497
Hanson, L. E., 1241*, 1242*, 1243*, 1244*, 1258*, 1277*
Harbers, L. H., 894*, 908*
Harlow, Harry F., 49S
Harmon, B. G., 386, 888*, 890*, 891*, 1255*, 1273*, 1277*
Harrington, R. B., 406, 414, 419, 424, 432, 903*, 1247*, 1268*
Harris, L. E., 593*, 599*
Harris, R. R., 248*
Harshbarger, K. E., 1277*
Harvey, W. R., 1271*
Harwin, G. O., 779
Hatfield, E. E., 734, 909*, 1252*, 1253*
Hawk, H. W., 919*, 924*, 931*, 1262*, 1266*, 1267*
Hawkins, K., 882*, 1274*
Hawton, J. D., 1242*
Hayden, J. S., 930*
Hayes, B. W., 262*, 539, 901*, 911*
Hays, R. L., 1277*
Hays, V. W., 37, 113, 157, 701, 729, 1102, 1123, 1249*, 1250*, 1272*, 1278*
Hazel, L. N., 878*, 1272*
Heaney, D. P., 142, 914*
Heath, M. E., 881*, 882*
Heck, M. C., 883*
Hedrick, H. B., 1279*
Heeney, M. W., 589*
Heidenreich, C. J., 655, 894*, 1267*
Heinze, C. D., 406
Heitman, H., Jr., 646, 675
Hembry, F. G., 199
Henderson, C. R., 877*, 879*
Henderson, Dean W., 323, 329, 334, 1260*
Henderson, Hugh E., 901*, 902*, 906*, 907*, 1246*, 1254*, 1273*
Hendricks, D. G., 217
Henricks, D. M., 929*, 1262*
Henrickson, R. L., 251*, 259*
Hentges, J. F., Jr., 247*
Herbel, C. H., 598*
Herd, D. B., 260*, 902*
Herring, H. K., 884*
Hersey, J. R., 1275*
Hershberger, Truman V., 902*
Hidiroglou, M., 902*
High, T. W., 249*
Hill, James Riley, Jr., 264*
Hinds, F. C., 914*, 1252*, 1274*
Hiner, R. L., 1133
Hines, R. H., 1245*, 1277*
Hintz, H. F., 646, 675, 1059
Hoar, D. W., 1245*
Hobbs, C. S., 249*, 255*, 256*
Hoefer, J. A., 884*, 894*, 994*, 1245*, 1260*, 1277*
Hoehne, O. E., 597*
Hoekstra, W. G., 14, 21, 381, 688, 890*, 917*, 927*, 1247*, 1248*, 1262*
Hogue, D. E., 192, 789, 886*, 898*
Holdren, R. D., 740
Holland, L. A., 583*
Hoover, W. H., 898*, 899*, 904*
Hopwood, M. L., 585*
Horvath, D. J., 892*
Hoskins, F. H., 257*
Howard, R. D., 885*
Howard, W. T., 903*
Howarth, B., Jr., 924*
Howell, W. E., 879*
Howes, Dean, 594*
Howland, B. E., 87, 716, 836
Howse, G. H., 886*
Huber, J. T., 914*
Huber, T. L., 1276*
Hudson, F. A., 591*, 921*
Hudson, L. W., 251*
Huff, W. C., 255*
Hulet, C. V., 5S, 584*, 585*, 924*
Hull, R. L., 596*
Hunter, A. G., 925*
Hunter, R. H. F., 925*, 1265*
Hurst, Victor, 212
Hurt, H. D., 891*, 920*
Hurt, P. V., 342
Husted, W. T., 903*

I

Ingalls, J. E., 290, 299, 311, 744
Ingalls, J. R., 283
Inskeep, E. K., 87, 918*, 1164
Ishizaki, Stanley M., 439, 597*
Isler, Gene A., 1271*
Itoh, H., 257*, 924*

J

Jackson, H. D., 402
Jacobson, N.L., 1256*
Janakiraman, K., 923*
Jensen, A. H., 203, 386, 888*, 890*, 891*, 1255*, 1273*, 1277*
Jensen, E. H., 96, 915*
Johns, D. M., 247*
Johnson, A. D., 925*, 1264*, 1268*
Johnson, D. D., 752
Johnson, H. D., 150, 1069, 1076
Johnson, H. E., 1278*
Johnson, J. C., Jr., 756
Johnson, L. J., 617
Johnson, R. J., 903*
Johnson, R. R., 73, 617, 855, 906*, 1257*
Johnston, R. P., Jr., 898*, 903*
Jones, B. M., Jr., 480
Jones, G. M., 64
Jones, L. E., 599*
Jones, Patricia H., 1181
Jordan, C. E., 1248*
Jordan, R. M., 624, 630, 1258*
Jorgensen, N. A., 912*
Joslyn, W. Danforth, 49S
Judge, M. D., 92, 885*
Jung, G. A., 636

K

Kahle, E. B., 893*
Kaiser, C. J., 881*, 882*, 1274*
Kaltenbach, C. C., 922*, 926*

Kamalu, Theodore, 1257*
Kamstra, L. D., 1268*
Karr, M. R., 652, 911*
Karsch, F. J., 926*
Kastenschmidt, L. L., 1262*
Kauffman, R. G., 1261*
Keith, J. M., 904*
Keller, A. G., 915*
Kellogg, T. F., 1102
Kelly, R. F., 883*, 885*
Kemp, J. D., 251*, 265*, 492, 783, 884*
Kemp, K. E., 1271*
Kendall, K. A., 1277*
Kennedy, L. G., 892*
Kennick, W. H., 29, 586*, 595*
Kercher, C. J., 904*
Kesler, E. M., 64, 898* 903*, 904*
Kidder, R. W., 648
Killinger, G. B., 249*
Kimbrell, E. F., 883*
Kincaid, C. M., 5, 923*
King, G. T., 883*
King, T. B., 886*, 909*
Kinney, T. B., 1107
Kiracofe, Guy H., 1159
Kirkpatrick, R. L., 716
Kirton, K. T., 926*
Kline, E. A., 323, 329, 334
Klopfenstein, T. J., 765, 1258*
Klosterman, Earle W., 1257*
Knight, Arlin D., 593*
Knowlton, P. H., 899*, 904*
Koch, D. E., 884*
Koch, R. M., 69, 290, 299, 311, 744
Koger, Marvin, 648
Kohler, G. O., 167
Kolari, O. E., 567
Komarek, R. J., 918*, 926*, 928*
Komer, E. G. 1276*
Kornegay, E. T., 52, 892*
Kowalczyk, T., 14, 21, 885*, 1247*, 1248*
Krehbiel, E. V., 923*
Krieg, K. L., 881*
Kroening, G. H., 526
Kromann, R. P., 587*, 591*, 592*, 596*, 598*, 905*, 1040, 1096
Krook, L., 888*
Kuhlemeier, K. V., 1111, 1265*
Kumaresan, P., 917*
Kumeno, Fumio, 1257*
Kyomo, M. L., 588*

L

Lal, A., 1271*
Lal, Prabhu, 879*
Lamb, P. E., 1253*
Lambiase, J. T., Jr., 916*, 917*
Lane, G. T., 885*, 905*, 1256*
Larson, W. M., 1245*
Lassiter, J. W., 44, 262*
Latham, S. Duane, 492
Lavker, Robert, 905*
Leathem, James H., 68S
Lee, C., 892*
Leekley, J. R., 1107
Leffel, E. C., 919*
Legates, J. E., 264*, 879*, 922*
Lehmann, R. P., 521, 817
Leibholz, Jane M. 37
Lepage, M., 902*
Lesperance, A. L., 96, 595*, 915*
Letter, A. A., 1274*
Lewis, J. K., 1268*
Lewis, J. M., 1274*
Lewis, P. K., Jr., 258*, 883*, 885*
Lewis, R. W., 887*, 1197, 1203
Lidvall, E. R., 256*
Lightfoot, W. C., 597*
Lin, C. W., 890*
Lindley, C. E., 886*
Linerode, P. A., 1259*
Link, B. A., 885*
Lister, David, 1280*
Little, C. O., 128, 185, 250*, 260*, 261*, 262*, 480, 539, 652, 892*, 896*, 899*, 900*, 901*, 910*, 911*
Little, Morgan, 593*
Lofgreen, G. P., 586*, 1138
Loggins, P. E., 263*, 648
Lohman, T. G., 1209, 1218
Long, C. H., 1263*
Long, J. I., 1250*
Long, T. A., 909*
Loosli, J. K., 244
Loper, D. C., 128
Loy, R. G., 821, 1059
Lucas, E. W., 1250*
Lucas, J. J., 891*, 918*, 923*
Ludwick, T. M., 927*, 1265*
Luecke, R. W., 884*, 894*, 1245*, 1260*, 1277*
Lund, M. M., 879*
Luther, Richard, 1116
Luther, R. M., 1258*
Lynch, G. P., 1133

M

MacGrath, W. S., 52
Mackintosh, D. L., 277
Madsen, Milton A., 586*
Magee, W. T., 1271*, 1279*
Mahajan, S. C., 923*, 1083, 1262*
Mahan, D. C., 1019
Main, M. J., 1261*
Majewski, L. K., 1252*
Mandigo, R. W., 251*, 259*, 449
Manns, D. F., 883*
Mansfield, M. E., 1252*, 1274*
Marchello, M. J., 885*
Marcilese, N. A., 906*
Marion, P. T., 248*, 260*, 599*
Markarechian, M., 879*
Marlowe, T. J., 265*, 880*
Martig, R. C., 920*, 927*
Martin, C. E., 1265*
Martin, Everett L., 682
Martin, S. Clark, 598*
Martin, T. G., 92, 885*, 905*
Martinet, Lise, 119S
Martz, F. A., 1249*, 1269*
Marusich, W. L., 889*
Mason, J. V., 892*
Mather, R. E., 879*
Matz, J., 590*
Mauleon, P., 119S
Maxwell, C. V., 796, 1247*, 1248*
Mayer, Dennis T., 933*
Mayrose, V. B., 701
McAtee, J. W., 262*
McBee, J. L., Jr., 892*
McCall, J. T., 37, 1123
McCampbell, H. C., 259*
McCarthy, R. D., 898*
McClure, K. E., 73, 617, 906*
McClure, W. H., 5, 263*, 878*
McCormick, John, 590*
McCormick, W. C., 1087
McCullough, M. E., 913*
McDonald, T. A., 1024
McFadden, William D., 584*
McFate, K. L., 881*
McGaughey, C. H., 44
McGilliard, A. D., 1256*
McGinty, D. D., 248*, 260*
McGuire, R. L., 185
McKibben, G. E., 1252*
McLaren, G. A., 893*
McNeal, L. G., 883*
McNitt, James I., 583*
McPherson, Archibald T., 575
Meacham, T. N., 931*
Meade, R. J., 58, 78, 1241*, 1242*, 1243*, 1244*
Mehen, S. M., 593*
Mehring, J. S., 1259*
Meiske, J. C., 1251*, 1252*, 1253*, 1269*, 1270*, 1277*
Melampy, R. M., 157, 922*, 929*, 1262*, 1264*, 1266*
Melliere, A. L., 1241*, 1242*, 1244*, 1246*
Mellin, T. N., 955
Melton, A. A., 253*
Menge, A. C., 1083
Menzies, C. S., 261*, 919*, 1159
Merkel, R. A., 277, 1154, 1246*, 1279*
Mertz, E. T., 890*
Messersmith, R. E., 752
Meyer, J. H., 591*, 592*, 675, 905*, 1096, 1138
Meyer, R. K., 381
Meyerhoeffer, D. C., 252*
Miller, C. N., 914*
Miller, E. R., 894*, 1245*, 1260*, 1277*
Miller, G., 590*
Miller, J. K., 906*, 907*, 908*
Miller, K. P., 1241*, 1242*, 1243*, 1244*, 1253*, 1254*
Miller, Paul, 879*
Miller, R. H., 877*
Miller, R. W., 916*
Minish, G. L., 1246*
Minyard, J. A., 591*, 595*, 1260*, 1271*
Mitchell, G. E., Jr., 128, 250*, 260*, 261*, 262*, 480, 539, 652, 892*, 896*, 899*, 900*, 901*, 902*, 911*
Mitchell, John, Jr., 258*
Mohler, M. T., 814, 908*
Moir, R. J., 509, 516, 668

Montgomery, T. H., 584*
Moody, N. W., 1250*, 1272*
Moody, W. G., 492, 809, 884*
Moore, C. P., 256*
Moore, J. E., 247*, 249*, 250*, 263*
Moore, L. A., 916*
Mori, H., 1266*
Morris, H. F., Jr., 915*
Morrison, R. D., 1251*
Morrissette, M. C., 927*
Morrow, G. A., 880*
Morrow, J. T., 252*
Morrow, R. E., 994
Moschette, D. S., 255*
Mott, G. O., 914*
Mrotek, J. J., 688, 927*
Muggenburg, B. A., 14, 21, 1247*, 1248*
Muhrer, M. E., 1274*, 1275*, 1276*
Mullins, A. M., 255*, 256*, 258*
Munson, A. W., 259*, 967
Murray, S. J., 636
Mussman, H. C., 894*
Myers, L. L., 402
Myhr, P. I., 161

N

Nalbandov, A. V., 926*
Neal, E. M., 253*
Neathery, Milton W., 248*
Nellor, John E., 1268*
Nelms, G. E., 360, 587*, 588*
Nelson, A. B., 596*, 598*, 1040
Nelson, D. K., 1256*
Nelson, E. C., 181
Nelson, L. A., 253*
Nelson, O. E., 890*
Nelson, T. E., 893*
Nesler, R. J., 261*
Neville, W. E., Jr., 927*
Newland, H. W., 897*, 898*, 901*, 902*, 906*, 907*, 1246*, 1247*, 1254*, 1273*
Newman, C. W., 589*
Newstead, J. D., 1186
Nichols, C. W., 460
Niswender, G. D., 922*, 926*
Noland, P. R., 250*, 258*, 893*
Noller, C. H., 903*, 1256*, 1270*
Nornes, H. O., 925*
Northam, J. I., 1048
Norton, H. W., 888*, 1218, 1261*, 1270*
Nygaard, L. J., 1245*

O

O'Bannon, R. H., 706, 711
O'Brien, Coleman A., 928*
O'Donovan, J. P., 907*
Oldfield, J. E., 34, 167, 592*, 597*
Olson, H. H., 897*
Oltjen, R. R., 521, 907*, 1000, 1133
Omtvedt, I. T., 372, 880*, 927*
Ormiston, E. E., 915*, 1277*
Ortavant, R., 119S
Osman, H. F., 593*
Ott, E. A., 414, 419, 424, 432
Outhouse, J. B., 92
Overfield, J. Ralph, 260*, 261*
Owen, B. D., 138
Owens, F. N., 1251*
Oxenreider, S. L., 1262*, 1264*

P

Paape, M. J., 932*
Packett, L. V., 402
Padgitt, D. D., 1249*, 1269*
Pahnish, O. F., 1035
Palm, B. W., 1241*
Parker, C. F., 1257*, 1271*
Parker, E. E., 599*
Parker, H. E., 424, 432
Parker, J. W., 893*
Parlow, A. F., 922*
Parrish, F. C., 1261*
Passbach, F. L., Jr., 886*
Patton, James D., 251*
Paules, Leon, 904*
Paulson, G. D., 1054, 1246*
Pearson, A. M., 843, 884*, 994
Pekas, Jerome C., 113
Pelletier, J., 119S
Perez, Manuel Casas, 912*
Perkins, J. L., 465
Perry, H. B., 908*
Perry, S. C., 906*, 907*, 908*
Perry, T. W., 760, 814, 894*, 908*, 1019, 1247*
Peters, H. F., 887*
Peterson, D. W., 585*
Peterson, R. C., 881*, 882*, 914*
Pfau, K. O., 879*
Pharr, Dale, 250*
Phillips, P. J., 886*
Pick, R. I., 1241*
Pickett, B. W., 918*, 923*, 926*, 928*
Pickett, R. A., 890*, 894*, 1019, 1024, 1247*, 1256*
Pigden, W. J., 142, 914*
Pinney, D. O., 260*
Plotka, E. D., 1268*
Polan, C. E., 914*
Poley, G. E., 175
Pond, W. G., 122, 526, 774, 888*, 895*
Pope, A. L., 87, 472, 716, 836, 933*, 1054, 1169, 1246*, 1248*, 1263*
Potter, G. D., 250*
Poulton, B. R., 898*, 899*, 904*, 926*
Pratt, Charles A., 972, 983
Price, D. A., 878*
Priode, B. M., 877*
Pritchard, G. I., 142
Probert, C. L., 132, 504
Pruett, J. B., 594*
Pryor, W. J., 592*
Pund, W. A., 261*
Purkhiser, E. D., 760
Purser, D. B., 509, 516, 668, 765, 1248*
Putnam, P. A., 817, 907*, 909*, 988, 1000, 1176

Q

Quevedo, M. M., 584*, 585*, 922*
Quinn, L. Y., 1102

R

Ragland, J. B., 881*
Rakes, A. H., 893*
Raleigh, R. J., 592*, 596*, 598*
Ralston, A. T., 29, 586*, 595*
Ramsey, C. B., 255*, 256*
Ranhotra, G. S., 630
Rash, J. J., 1275*
Rathmacher, R. P., 929*
Ray, Earl E., 449, 583*, 587*, 588*, 592*, 598*, 1040, 1172
Ray, Maurice L., 247*
Razzaque, Abdur, 896*
Reed, Alex, 257*, 897*
Reedy, L. P., 1267*
Reese, N. A., 14, 21, 1248*
Reese, W. C., 889*
Reid, I. M., 895*
Reid, J. T., 526
Reid, R. L., 636
Reimann, E. M., 1247*, 1248*
Reineke, E. P., 994
Renbarger, Bob, 909*
Rench, R. D., 881*
Reynolds, D. A., 588*, 592*
Reynolds, W. L., 252*
Rhykerd, C. L. 914*, 1270*
Rice, R., 590*
Richardson, D., 894*, 908*
Richardson, G., 588*
Richardson, Paula, 504
Riddle, Kent, 588*, 880*
Riesen, J. W., 929*, 930*
Riggs, J. K., 248*, 253*, 254*, 263*, 264*, 265*
Riker, J. T., III, 894*
Riley, J. G., 1263*
Riley, M. L., 587*
Ringkob, T. P., 886*
Robbins, J. D., 929*
Robbins, R. C., 722
Roberts, John H., 1145
Roberts, W. K., 908*
Robertson, George L., 261*
Robinson, E. D., 599*
Robison, O. W., 916*
Robson, Richard M., 1261*
Rogers, Robert W., 886*
Roller, W. L., 882*
Romack, F. E., 1253*
Roman, J., 250*
Ronning, Magnar, 1138
Rooney, J. R., 892*
Ross, C. V., 881*, 1263*, 1274*
Rothlisberger, J. A., 290, 299, 311, 744
Roubicek, C. B., 1035
Rousseau, J. E., Jr., 891*, 920*
Rowden, W. W., 69, 290, 299, 311
Rowe, K. E., 29
Roy, Debdutta, 445
Ruiz, M. E., 1250*
Rumburg, C. B., 598*

Rumsey, T. S., 909*
Rusnak, John J., 909*
Rust, J. W., 1241*, 1242*, 1244*
Rust, R. E., 334
Rutherford, John, 1279*
Rutledge, E. A., 693
Rutledge, James E., 929*
Ruttle, J. L., 583*, 584*

S

Saacke, R. G., 929*
Saba, W. J., 392
Sagebiel, Joe A., 1274*
Saiduddin, Syed, 929*, 930*
St. Laurent, G. J., 910*
Salisbury, G. W., 476
Sanchez, L. E., 584*
Sandy, R. A., 914*
Sanford, Lorin G., 1257*
Sawhney, D. S., 584*, 585*, 922*, 932*
Scarth, R. D., 886*
Schaadt, H., Jr., 73
Schaffer, J. H., 907*
Schake, L. M., 248*, 254*, 260*, 265*
Schelling, G. T., 909*
Schmitt, G. H., 911*
Scholl, J. M., 912*
Schomberg, D. W., 1181
Schoonover, C. O., 360, 587*, 588*
Schul, G. A., II, 406
Schultz, J. R., 157
Schultze, A. B., 339
Schuman, L. M., 1269*
Schweigert, B. S., 884*
Schwulst, F. J., 1045
Scott, K. W., 258*, 893*
Scott, V. B., 257*, 258*
Seerley, R. W., 1244*
Sefidbakht, Nasrollah, 586*
Self, H. L., 342
Sell, O. E., 259*
Sen, A., 445
Senko, Monte G., 49S
Sewell, H. B., 262*
Sewell, R. F., 796, 892*
Shaikh, Abubakar A., 1268*
Shanklin, S. H., 894*
Shawver, C. B., 886*, 913*
Shelby, C. E., 1148, 1272*
Shelby, D. R., 352, 930*
Shelton, J. M., 880*
Shelton, K. S., 255*
Shelton, Maurice, 252* 877*
Sherritt, G. W., 886*
Sherrod, L. B., 181, 353*, 439, 594*, 597*
Shirley, R. L., 249*, 250*, 613, 648
Shively, Jesse, 1256*
Shoemaker, B. E., 1253*
Signoret, J. P., 119S
Sim, Phillip L., 590*
Simpson, C. F., 263*
Sinha, Y. N., 223, 930*
Skelley, G. C., Jr., 887*
Sliger, R. L., 255*
Smart, W. W. G., Jr., 1128
Smith, E. F., 908*
Smith, Gary E., 355, 597*
Smith, G. S., 1209, 1218
Smith, Jack, Jr., 895*
Smith, J. C., 264*
Smith, L. W., 207, 916*, 1048
Smith, R. C., 1091
Smith, S. E., 889*
Smith, Stanley L., 583*, 1172
Smith, Warren, 904*
Smith, W. H., 355, 414, 419, 424, 432, 814, 901*, 907*, 1024
Smithson, Larry, 909*, 922*
Sneva, F. A., 598*
Sorensen, A. M., Jr., 919*, 929*
Southwell, B. L., 259*, 756
Spahr, S. L., 915*
Speer, V. C., 37, 157, 701, 729, 1102, 1123, 1249*, 1250*, 1272*, 1278*
Speth, C. F., 915*
Spies, H. G., 919*, 1159
Spooner, A. E., 247*
Spurlock, G. M., 454
Stallcup, O. T., 930*
Standish, J. F., 377
Stanislaw, C. M., 880*
Stephens, D. F., 922*, 1264*
Stevermer, E., 1278*
Stielau, W. J., 592*
Stob, Martin, 424
Stockland, W. L., 1241*, 1244*
Stonaker, H. H., 583*, 588*, 779, 880*
Stone, E. J., 915*
Stormshak, F., 931*
Stothers, S. C., 882*
Stouffer, J. R., 192, 526, 886*
Stowe, H. D., 892*, 895*
Streeter, C. L., 597*
Stringer, W. C., 1279*
Stromer, M. H., 334, 1145, 1260*
Struthers, R. D., 217
Sudweeks, E. M., 599*
Suess, G. G., 887*, 1197, 1203
Suits, R. D., 1276*
Sullivan, J. T., 83
Sumption, L. J., 69, 290, 299, 311, 1045
Swan, S. M., 821
Swierstra, E. E., 931*
Swiger, L. A., 69, 290, 299, 311, 744, 1045, 1271*
Symons, Linda D., 891*

T

Tanabe, T. Y., 931*
Tate, D. J., 931*
Taylor, Bruce, 392, 593*
Taylor, J. C., 886*
Taylor, R. L., 1035
Taylor, R. W., 903*
Teague, H. S., 693, 882*, 895*
Temple, R. S., 252*, 255*, 256*, 1087
Templeton, Judith A., 910*
Terrell, R. N., 887*
Tesar, M. B., 283
Thatcher, W. W., 932*
Theurer, Brent, 175, 392, 592*, 593*, 598*, 903*, 910*
Theurer, Larry, 880*
Thibault, C., 119S
Thibodeaux, Connie Ann, 254*
Thomas, J. W., 283, 397
Thomas, O. O., 589*
Thompson, Alan M., 113
Thompson, J. T., 261*, 910*
Thornton, J. H., 1251*
Thornton, J. W., 1133
Thrasher, D. M., 257*, 258*, 261*
Tillman, A. D., 181, 249*, 259*, 263*, 484, 893*, 899*, 1251*
Tilton, J. E., 1264*
Ting, K. C., 882*
Tolman, Walter, 1259*
Topel, D. G., 277, 1154
Torell, D. T., 675
Totusek, Robert, 249*
Tovar, J., 264*
Trei, John E., 910*
Tremere, A. W., 138
Trenkle, Allen, 609, 1111, 1116, 1256*, 1257*, 1265*
Tribble, R. L., 599*
Troelsen, J. E., 161
Troutt, H. F., 1265*
Tsai, L. I., 893*
Tucker, H. A., 223, 930*, 932*
Tucker, H. F., 258*
Tucker, R. E., 262*, 911*
Turman, E. J., 1264*
Turner, C. W., 917*
Twardock, A. R., 1209, 1218
Tyler, W. E., 883*
Tyler, W. J., 929*, 930*
Tyznik, W. J., 765, 1259*

U

Uhart, B. A., 911*
Ulberg, L. C., 919*, 922*, 925*
Ullrey, D. E., 217, 894*, 897*, 898*, 907*, 1247*, 1260*, 1278*
Urban, W. E., Jr., 1148
Utley, P. R., 1263*

V

Vaccaro, Rodolfo, 1063
Valentine, B. L., 886*
Van Demark, N. L., 925*, 1264*
Vander Noot, G. W., 52, 806, 891*
Van Dyne, George M., 915*
Van Horn, J. L., 583*
Van Vleck, L. D., 526, 879*
Varnell, T., 590*
Vera Cruz, N. C., 1264*
Vermedahl, L. D., 1241*, 1242*, 1243*
Vesely, J. A., 887*
Vetter, R. L., 1257*
Veum, T. L., 895*
Vincent, C. K., 925*
Vogt, D. W., 5, 252*, 265*
Vohnout, Karel, 252*

W

Waddill, D. G. 257*
Wagner, W. C., 497
Wahed, A. B. M. F., 253*
Waitt, W. P., 1248*
Waldo, D. R., 916*
Waldrip, W. J., 599*
Walker, E. F., Jr., 122, 888*, 895*
Wallace, H. D., 48, 613, 706, 711, 722, 827, 920*
Wallace, Joe D., 592*, 596*, 598
Walter, M. J., 334
Walters, Lowell E., 682, 967
Warner, R. G., 897*
Warnick, A. C., 706, 711
Wass, D. F., 1242*, 1243*
Wastell, M. E., 1244*
Watson, D. F., 885*
Webb, K. E., Jr., 911*
Weeth, H. J., 932*
Weir, W. C., 675
Welch, J. G., 806, 911*
Wellington, G. H., 192, 526, 886*
Wells, C. F., 1244*
Welsch, C. W., 1276*
Whatley, J. A., Jr., 372, 880*, 1148
Wheat, J. D., 454
White, T. W., 25
Whiteker, M., 1278*
Whiteman, J. V., 259*, 460, 682, 967, 1029
Whittow, G. C., 932*
Wieckert, D. A., 1280*
Wilcox, C. J., 250*
Willham, R. L., 372, 880*, 972, 983
Williams, Charles H., 933*
Williams, E. E., Jr., 907*, 1000
Willson, F. L., 583*
Wilson, Ben B., 912*, 1258*
Wilson, G. R., 927*, 1265*
Wilson, Lowell L., 881*, 882*, 914*, 1272*, 1274*, 1279*
Wilson, R. L., 212
Wilson, R. P., 1274*, 1275*, 1276*
Wiltbank, J. N., 988
Windels, H. F., 1277*
Wise, M. B., 532, 1128
Wistrand, G. C., 263*
Witters, W. L., 348, 1268*
Wolf, Dana, 1256*
Wolke, R. E., 891*
Woods, R. D., 256*, 257*
Woods, Walter, 102, 175, 912*, 1258*, 1259*
Woody, C. O., 923*, 933*, 1169, 1263*
Woolfolk, P. G., 250*, 251*, 900*
Wu, S. H., 1186
Wurster, M. J., 1268*
Wyllie, D., 1278*

Y

Yang, S. P., 254*, 255*
Yarns, D. A., 1176
Yassen, A. M., 933*
Yates, H. F., 248*
Yoder, R. D., 609
Yoon, Y. M., 740, 1091
Youatt, W. G., 1278*
Young, C. W., 1253*
Young, E. P., 889*
Yousef, M. K., 150, 1069, 1076

Z

Ziegler, J. H., 886*
Zimbelman, R. G., 207, 1048
Zimmer, P. R., 1255*
Zimmerman, D. R., 599*, 1267*, 1268*
Zimmerman, J. E., 1253*
Zinn, D. W., 587*
Zobrisky, S. E., 809, 1279*